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Eric Perouse

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WENDEROTH, LIND & PONACK, L.L.P.

1030 15th Street, N.W.,

Suite 400 East

Washington, DC 20005-1503

EXAMINER

TANNER, JOCELIN C

ART UNIT

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3731

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,489	Applicant(s) PEROUSE, ERIC	
	Examiner JOCELIN C. TANNER	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Amendment filed 25 August 2009.

Claims 25-44 are currently pending. The Examiner acknowledges the cancellation of claims 1-24.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 August 2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 25-27, 29, 31, 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1- now US Patent No. 7,087,088).**

4. Regarding claim **25**, Berg et al. discloses a deformable lattice (100) having crossed metal [0097] strips forming a diagonal pattern of open spaces or "meshes" that

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is deformable between a retracted state having a small diameter and an expanded state of greater diameter (Figs. 3-7), two external hooks [0123] are capable of defining a clamp for anchoring the prosthesis to tissue, the hooks are mounted to the lattice at opposite sides of one of the meshes (Figs. 16 and 17) wherein the meshes have a first shape when the lattice is contracted and the hooks are spread apart and a second shape when the lattice is expanded such that the at least two hooks of the clamp are in a close-together position [0114].

The embodiment of figs. 3-7 fails to disclose hooks that are movable between a spaced-apart position in which the clamp is open, and a closer-together position in which the clamp is closed, however, Berg et al. discloses that any types of hooks described therein may be suitable [0099]. Figs. 33-35 of Berg et al. disclose hooks (3310) that are movable between a spaced-apart position in which the clamp is open, and a closer-together position in which the clamp is closed ([0099, 0169-0173], Figs. 33-35). Therefore, it would have been obvious to one of ordinary skill in the art to have substituted one known hook for another for the predictable result of a prosthesis having the ability to engage tissue of an inner wall of a body passage.

5. Regarding claim **26**, Berg et al. discloses at least two hooks that are connected to the lattice and capable of moving relative to each other during deformation of the lattice from a retracted to an expanded configuration (Figs. 33-35).

6. Regarding claim **27**, Berg et al. discloses meshes of a lattice having a shape of a deformable quadrilateral wherein the at least two hooks are connected to the lattice at a respective corner of the meshes (Figs. 16, 17).

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7. Regarding claim **29**, Berg et al. discloses at least two hooks having a strand twisted connection end to the lattice [0098].
8. Regarding claim **31**, Berg et al. discloses that each hook (4300) may be in the form of a substantially rectilinear blade, the two hooks extending facing each other and spaced apart from each other when the clamp is open (Fig. 43).
9. Regarding claim **32**, Berg et al. discloses a lattice that is elastically deformable towards an expanded position [0095, 0097].
10. Regarding claim **34**, Berg et al. discloses a lattice having a tubular shape and at least two hooks (3310) that are offset circumferentially with respect to each other around the tubular prosthesis (3300) (Fig. 33).
11. Regarding claim **35**, Berg et al. discloses two hooks (3310) that are offset circumferentially by a first circumferential spacing with respect to each other around the tubular shaped lattice, the at least two hooks (3310) that are offset circumferentially by a second circumferential spacing when the two hooks are in a close-together position that is smaller than the first circumferential spacing (Figs. 33-35).
12. **Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1) in view of Berg et al. (US Patent No. 6,451,048).**
13. Regarding claim **28**, Berg et al. discloses all of the limitations previously discussed except for at least two hooks being welded or soldered to the lattice.

Berg et al. ('048) teaches a hook (FIG. 4a, element #34) that is welded or soldered to the frame or "lattice" at its connection end (column 4, lines 65-68, FIG. 4a).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have soldered or welded the hooks of Berg et al. ('8377) to the lattice, as taught by Berg et al. ('048), for the predictable result of securing the hooks to the lattice.

14. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1 – now US Patent No. 7,087,088) in view of Bender et al. (US Patent No. 7,267,682).

15. Regarding claim **16**, Berg et al. discloses all of the limitations previously discussed except for two hooks having a shepherd's crook end and overlapping in part to form a clamp.

Bender et al. teaches a staple having ends in the form of a shepherd's hook and overlapping in part to secure tissue of a graft vessel to tissue of a target vessel (Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the hooks of Berg et al. with shepherd's crook ends and the ability to overlap in part to prevent slippage.

16. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1) in view of Schwartz et al. (US Patent No. 5,443,496).

17. Regarding claim **33**, Berg et al. discloses all of the limitations previously discussed except for a stretchable liquid-proof film.

Schwartz et al. teaches a lattice formed of wire having a polyurethane film disposed thereon wherein the film is capable of stretching to preserve the radial expandability and axial flexibility of the lattice (column 4, lines 11-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the lattice of Berg et al. with the stretchable polyurethane film, as taught by Schwartz et al., to provide a biocompatible polymeric surface to contact and support a body lumen and to preserve the radial expandability and axial flexibility of the lattice (column 4, lines 11-34).

18. Claims 36-39, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1) in view of Perez et al. (US Patent No. 6,984,244).

19. Regarding claim **36**, Berg et al. discloses a deformable lattice (100) having crossed metal [0097] strips forming a diagonal pattern of open spaces or "meshes" that is deformable between a retracted state having a small diameter and an expanded state of greater diameter (Figs. 3-7), two external hooks [0123] are capable of defining a clamp for anchoring the prosthesis to tissue, the hooks are mounted to the lattice at opposite sides of one of the meshes (Figs. 16 and 17) wherein the meshes have a first shape when the lattice is contracted and the hooks are spread apart and a second shape when the lattice is expanded such that the at least two hooks of the clamp are in a close-together position [0114].

The embodiment of figs. 3-7 fails to disclose hooks that are movable between a spaced-apart position in which the clamp is open, and a closer-together position in

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which the clamp is closed, however, Berg et al. discloses that any types of hooks described therein may be suitable [0099]. Figs. 33-35 of Berg et al. disclose hooks (3310) that are movable between a spaced-apart position in which the clamp is open, and a closer-together position in which the clamp is closed ([0099, 0169-0173], Figs. 33-35). Therefore, it would have been obvious to one of ordinary skill in the art to have substituted one known hook for another for the predictable result of a prosthesis having the ability to engage tissue of an inner wall of a body passage.

Perez et al. teach a medical repair device delivery system wherein a repair device or "lattice" (390) is encompassed by a capsule or "holding means" (FIG. 12, element #333) which restrains the repair device and prevents its deployment (column 12, lines 63-64). The lattice is secured by its distal end to an inner catheter or "delivery tube" (FIG. 12, element #320) which restricts the repair device from deployment and delivers the device to the treatment site. The hooks (FIG. 2, element #96) are pressed into the grooves or "channels" (FIG. 14, element #376) arranged within the stop ring or "confinement duct" (FIG. 12, element #370) of a lattice delivery tube that is attached to the distal end of the inner catheter. The holding means prevents the hooks from contacting the sheath assembly (column 12, lines 65-68, FIG. 13, element #340). The hooks are free to embed in the vasculature once the capsule and sheath assembly are retracted (column 13, lines 12-13, column 14, lines 15-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a retaining device for holding the lattice

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of Berg et al. in a retracted state, as taught by Perez et al for the predictable result of preventing the hooks from piercing the tissue prior to installation.

20. Regarding claim **37**, Berg et al. discloses longitudinal grooves wherein hooks are disposed therein (column 13, lines 40-46).

21. Regarding claim **38**, Berg et al. discloses at least two hooks that are connected to the lattice and capable of moving relative to each other during deformation of the lattice from a retracted to an expanded configuration (Figs. 33-35).

22. Regarding claim **39**, Berg et al. discloses meshes of a lattice having a shape of a deformable quadrilateral wherein the at least two hooks are connected to the lattice at a respective corner of the meshes (Figs. 16, 17).

23. Regarding claim **42**, Berg et al. discloses that each hook (4300) may be in the form of a substantially rectilinear blade, the two hooks extending facing each other and spaced apart from each other when the clamp is open (Fig. 43).

24. Regarding claim **44**, Berg et al. discloses a lattice having a tubular shape and at least two hooks (3310) that are offset circumferentially with respect to each other around the tubular prosthesis (3300) (Fig. 33).

25. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1) in view of Perez et al. (US Patent No. 6,984,244), as applied to claim 38 above, and further in view of Berg et al. (US Patent No. 6,451,048).

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26. Regarding claim **40**, the combination of Berg et al. ('8377) and Berg et al. ('048) discloses all of the limitations previously discussed except for at least two hooks being welded or soldered to the lattice.

Berg et al. ('048) teaches a hook (FIG. 4a, element #34) that is welded or soldered to the frame or "lattice" at its connection end (column 4, lines 65-68, FIG. 4a).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have soldered or welded the hooks of the combination of Berg et al. ('8377) and Berg et al. ('048) to the lattice, as taught by Berg et al. ('048), for the predictable result of securing the hooks to the lattice.

27. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1 – now US Patent No. 7,087,088) in view of Perez et al. (US Patent No. 6,984,244), and further in view of Bender et al. (US Patent No. 7,267,682).

28. Regarding claim **41**, the combination of Berg et al. ('8377) and Berg et al. ('048) discloses all of the limitations previously discussed except for two hooks having a shepherd's crook end and overlapping in part to form a clamp.

Bender et al. teaches a staple having ends in the form of a shepherd's hook and overlapping in part to secure tissue of a graft vessel to tissue of a target vessel (Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the hooks of the combination of Berg et al. ('8377) and Berg et al. ('048) with shepherd's crook ends and the ability to overlap in part to prevent slippage.

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29. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US PGPub No. 2003/0018377A1) in view of Perez et al. (US Patent No. 6,984,244), as applied to claim 36 above, and further in view of Schwartz et al. (US Patent No. 5,443,496).

30. Regarding claim **43**, the combination of Berg et al. ('8377) and Berg et al. ('048) discloses all of the limitations previously discussed except for a stretchable liquid-proof film.

Schwartz et al. teaches a lattice formed of wire having a polyurethane film disposed thereon wherein the film is capable of stretching to preserve the radial expandability and axial flexibility of the lattice (column 4, lines 11-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the lattice of the combination of Berg et al. ('8377) and Berg et al. ('048) with the stretchable polyurethane film, as taught by Schwartz et al., to provide a biocompatible polymeric surface to contact and support a body lumen and to preserve the radial expandability and axial flexibility of the lattice (column 4, lines 11-34).

Response to Arguments

31. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOCELIN C. TANNER whose telephone number is

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(571)270-5202. The examiner can normally be reached on Monday through Thursday between 9am and 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jocelin C. Tanner/
9/08/2009
Examiner, Art Unit 3731

/Anhtuan T. Nguyen/
Supervisory Patent Examiner, Art Unit 3731
9/14/09